



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,484	06/25/2001	Wade Lee	13.041	9387

9651 7590 08/01/2003

ELLIOT B. ARONSON
5001 HARBORD DRIVE
OAKLAND, CA 94618

EXAMINER

COURSON, TANIA C

ART UNIT	PAPER NUMBER
----------	--------------

2859

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,484

Applicant(s)

LEE, WADE

Examiner

Tania C. Courson

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5,8,9 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) 6,7 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5,8,9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. The election requirement stated in a previous office action (Paper No. 5) is hereby repeated, and thus maintained **FINAL**.
2. Claims 6-7 and 10 are maintained withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13, 2-5 and 8 are rejected under 35 U. S. C. 103 (a) as being unpatentable over a worklight described in the specification, specifically page 1, lines 5-15, filed on June 25, 2001 in the Patent Application Serial Number 09/891,484 [hereinafter Prior Art] in view of Parker (US 3,893,340).

The Prior art discloses a worklight and suggests that the exterior surface tends to get hot to human touch and that printed labels have been added to the surface of the worklight as a

Art Unit: 2859

warning indicator, as claimed by the applicant with the exception of the warning indicator being a thermochromic warning indicator.

With respect to an indicator comprising a thermochromic substance in thermal communication with at least a portion of at least one exterior surface, said thermochromic substance being formulated to undergo a conspicuous color change in response to heat from said at least one exterior surface during normal operation, said indicator being structured and arranged to display an indication, when said thermochromic substance undergoes said conspicuous color change, a substrate wherein said thermochromic substance is carried on said substrate, said substrate is disposed with respect to said at least one exterior surface so as to place said thermochromic substance in thermal communication with at least a portion thereof, a warning indicia carried on said substrate, and wherein said thermochromic substance is normally substantially opaque at room temperature so as to substantially obscure said indicia and turns transparent in response to said heat from said at least one exterior surface so as to expose said indicia, wherein said substrate is transparent, and said thermochromic substance and said indicia are carried on the underside of said substrate, whereby said substrate provides a protective covering for said thermochromic substance and indicia, wherein said thermochromic substance forms a layer on the underside of said substrate, said indicia are applied to the underside of said layer, and said substrate with said thermochromic layer and indicia are adhered in position at said at least one exterior surface with the undersides thereof directed toward said at least one exterior surface, and further comprising a thermal moderator disposed between said thermochromic substance and said at least one exterior surface, whereby said thermochromic substance is in

Art Unit: 2859

thermal communication with said at least one exterior surface through said thermal moderator.

Parker teaches a thermally insulated warning indicator that consists of an indicator comprising a thermochromic substance (Fig. 4, liquid crystal composition 22) in thermal communication, with at least a portion of at least one exterior surface (column 5, lines 1-11), said thermochromic substance being formulated to undergo a conspicuous color change in response to heat from said at least one exterior surface during normal operation (column 5, lines 1-11), said indicator being structured and arranged to display an indication when said thermochromic substance undergoes said conspicuous color change (column 5, lines 1-11), a substrate (Fig. 4, translucent 28) wherein said thermochromic substance is carried on said substrate, said substrate is disposed with respect to said at least one exterior surface so as to place said thermochromic substance in thermal communication with at least a portion thereof, a warning indicia (Fig. 4, masking 24) carried on said substrate, and wherein said thermochromic substance is normally substantially opaque at room temperature so as to substantially obscure said indicia and turns transparent in response to said heat from said at least one exterior surface so as to expose said indicia (column 1, lines 20-24), wherein said substrate is transparent, and said thermochromic substance and said indicia are carried on the underside of said substrate, whereby said substrate provides a protective covering for said thermochromic substance and indicia (column 1, lines 20-24), wherein said thermochromic substance forms a layer on the underside of said substrate, said indicia are applied to the underside of said layer, and said substrate with said thermochromic layer and indicia are adhered in position at said at least one exterior surface with the undersides thereof directed toward said at least one exterior surface (Fig. 4), and further comprising a thermal moderator (Fig. 4, insulator 20) disposed between said thermochromic substance and

Art Unit: 2859

said at least one exterior surface, whereby said thermochromic substance is in thermal communication with said at least one exterior surface through said thermal moderator (Fig. 4). Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify the worklight with a warning indicator of the Prior Art, so as to include a thermally insulated warning indicator as taught by Parker, so as to further increase the usefulness of liquid crystal/thermochromic thermometers for indicating temperature of relatively high temperature objects as well as to generate a visual message that can be used as a warning device for individuals during use of the device.

5. Claims 9 and 11 are rejected under 35 U. S. C. 103 (a) as being unpatentable over Prior Art in view of Parker.

The Prior art discloses a worklight and suggests that the exterior surface tends to get hot and that printed labels have been added to the surface of the worklight as a warning indicator, as claimed by the applicant with the exception of the warning indicator being a thermochromic warning indicator.

With respect to a transparent protective covering disposed in a readily visible location at least one exterior surface, a thermochromic substance disposed between said transparent protective covering and said at least one exterior surface and a thermal moderator disposed between said thermochromic substance and said at least one exterior surface, wherein said thermochromic substance is in thermal communication with at least a portion of at said at least one exterior surface through said thermal moderator and is formulated to undergo a conspicuous

Art Unit: 2859

color change in response to heat from said at least one exterior surface during normal operation, said conspicuous color change revealing an indication that said at least one exterior surface is of a temperature hot to human touch, a warning indicia wherein said thermochromic substance is disposed so as to cover said indicia, wherein said thermochromic substance is normally substantially opaque at room temperature so as to substantially obscure said indicia and turns transparent in response to said heat from said at least one exterior surface so as to expose said indicia, Parker teaches a thermally insulated warning indicator that consists of a transparent protective covering (Fig. 4, translucent 28) disposed in a readily visible location at least one exterior surface (column 5, lines 1-11), a thermochromic substance (Fig. 4, liquid crystal composition 22) disposed between said transparent protective covering and said at least one exterior surface and a thermal moderator (Fig. 4, insulator 20) disposed between said thermochromic substance and said at least one exterior surface, wherein said thermochromic substance is in thermal communication with at least a portion of said at least one exterior surface through said thermal moderator and is formulated to undergo a conspicuous color change in response to heat from said at least one exterior surface during normal operation (column 5, lines 1-11), said conspicuous color change revealing an indication that said at least one exterior surface is of a temperature hot to human touch (column 5, lines 1-11), a warning indicia (Fig. 4, masking 24) wherein said thermochromic substance is disposed so as to cover said indicia, wherein said thermochromic substance is normally substantially opaque at room temperature so as to substantially obscure said indicia and turns transparent in response to said heat from said at least one exterior surface so as to expose said indicia (column 1, lines 20-24). Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was

Art Unit: 2859

made to further modify the worklight with a warning indicator of the Prior Art, so as to include a thermally insulated warning indicator as taught by Parker, so as to further increase the usefulness of liquid crystal/thermochromic thermometers for indicating temperature of relatively high temperature objects as well as to generate a visual message that can be used as a warning device for individuals during use of the device.

6. Claim 12 is rejected under 35 U. S. C. 103 (a) as being unpatentable over Prior Art and Parker, as applied to claims 9 and 11 as stated above, and further in view of MacDonald (US 3,877,411).

The Prior art discloses a worklight with a warning indicator, as stated above in paragraph 5, with the exception of a recessed area to receive a warning indicator.

With respect to at least one exterior surface formed with a recessed area sized to receive a protective covering and a warning indicator such that the outer surface of said covering is substantially flush with said at least one exterior surface, MacDonald teaches a recessed area for a warning indicator that consists of at least one exterior surface formed with a recessed area (Fig. 1, recess 12) sized to receive a protective covering (Fig. 1, surface 15) and a warning indicator (Fig. 1, disc 4) such that the outer surface of said covering is substantially flush with said at least one exterior surface (Fig. 1). Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify the worklight with a warning indicator of the Prior Art and Parker, so as to include a recessed area for a warning indicator as

Art Unit: 2859

taught by MacDonald, so as to provide a means to removably secure an indicator from a recessed area.

Response to Arguments

7. Applicant's arguments filed May 20, 2003 have been fully considered but they are not persuasive.

8. With regard to the applicant's three separate arguments:

a. The declarations filed on November 19, 2002 and May 20, 2003 have been entered and have been considered but do not overcome the rejection. The worklight has been established as an object that is a well known prior art and the Parker reference is used to indicate the increased temperature of an object, thus it would have been obvious to combine these two references, the fact that there is no one reference does not make it non-obvious to use these two references.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Art Unit: 2859

b. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., thickness of the moderator) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

c. In response to applicant's argument that liquid crystal thermometers is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, **if not, then be reasonably pertinent to the particular problem with which the applicant was concerned**, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

9. With regard to paragraph 8 of the examiner's office action (Paper No. 9). The reason why "moot in view of the new ground(s) of rejection" was primarily used was due to the fact that there was a slight change in the motivation statement of the primary references (Prior Art, Parker) thus it remains a proper statement.

10. In response to applicant's argument that the MacDonald reference and the Parker reference are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, **if not, then be reasonably pertinent to the particular problem with which the applicant was concerned**, in order to be relied upon as a basis for

Art Unit: 2859

rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

11. Once again, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., thickness of the thermal moderator) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). It is confusing when the applicant states that the "thickness of the moderator" is not intended to be a limitation of the claims, when the applicant had just previously argued that a "2-inch thick moderator is unworkable".

12. Note that the applicant's drawings show a moderator must be used, there are no figures in which a moderator does not exist, the applicant's specification further supports the use of a thermal moderator (29) in order to avoid unacceptable performances by thermochromic inks (applicant's specification, page 6, lines 22-29). The use of a moderator is required in view of the applicant's drawings and specification.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2859

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania C. Courson whose telephone number is (703) 305-3031. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez, can be reached on (703) 308-3875. The fax number for this Organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



DIEGO F.F. GUTIERREZ
SUPERVISORY PATENT EXAMINER
GROUP ART UNIT 2859

TCC
July 30, 2003